



National Nutrient Database for Standard Reference

Release 28 slightly revised May, 2016

Statistics Report 20008, Buckwheat

Report Date: June 27, 2017 02:55 EDT

Nutrient values and weights are for edible portion.

Nutrient	Unit	Value Per 100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Proximates													
Water	g	9.75	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Energy	kcal	343	--	--	--	--	--	--	--	--	Calculated or imputed	--	10/1989
Energy	kJ	1435	--	--	--	--	--	--	--	--	Calculated or imputed	--	05/2005
Protein	g	13.25	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Total lipid (fat)	g	3.40	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Ash	g	2.10	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Carbohydrate, by difference	g	71.50	--	--	--	--	--	--	--	--	Calculated or imputed	--	10/1989
Fiber, total dietary	g	10.0	--	--	--	--	--	--	--	--	Calculated or imputed	--	10/1989
Minerals													
Calcium, Ca	mg	18	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Iron, Fe	mg	2.20	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Magnesium, Mg	mg	231	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989

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Phosphorus, P	mg	347	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Potassium, K	mg	460	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Sodium, Na	mg	1	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Zinc, Zn	mg	2.40	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Copper, Cu	mg	1.100	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Manganese, Mn	mg	1.300	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Selenium, Se	µg	8.3	--	--	--	--	--	--	--	--	Calculated or imputed	--	12/1997
Vitamins													
Vitamin C, total ascorbic acid	mg	0.0	--	--	--	--	--	--	--	--	Calculated or imputed	--	10/1989
Thiamin	mg	0.101	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Riboflavin	mg	0.425	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Niacin	mg	7.020	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Pantothenic acid	mg	1.233	--	--	--	--	--	--	--	--	Calculated or imputed	--	10/1989
Vitamin B-6	mg	0.210	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Folate, total	µg	30	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989

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Folic acid	µg	0	--	--	--	--	--	--	--	--	Assumed zero	--	01/2001
Folate, food	µg	30	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Folate, DFE	µg	30	--	--	--	--	--	--	--	--	Calculated or imputed	--	05/2005
Vitamin B-12	µg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	10/1989
Vitamin B-12, added	µg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	09/2004
Vitamin A, RAE	µg	0	--	--	--	--	--	--	--	--	Calculated or imputed	--	06/2002
Retinol	µg	0	--	--	--	--	--	--	--	--	Assumed zero	--	06/2002
Vitamin A, IU	IU	0	--	--	--	--	--	--	--	--	Calculated or imputed	--	10/1989
Vitamin D (D2 + D3)	µg	0.0	--	--	--	--	--	--	--	--	Assumed zero	--	11/2008
Vitamin D	IU	0	--	--	--	--	--	--	--	--	Assumed zero	--	02/2009
Lipids													
Fatty acids, total saturated	g	0.741	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
4:0	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
6:0	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
8:0	g	0.035	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
10:0	g	0.018	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
12:0	g	0.010	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
14:0	g	0.025	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
16:0	g	0.450	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
18:0	g	0.047	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Fatty acids, total monounsaturated	g	1.040	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
16:1 undifferentiated	g	0.023	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
18:1 undifferentiated	g	0.988	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
20:1	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
22:1 undifferentiated	g	0.012	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Fatty acids, total polyunsaturated	g	1.039	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
18:2 undifferentiated	g	0.961	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
18:3 undifferentiated	g	0.078	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
18:4	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
20:4 undifferentiated	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
20:5 n-3 (EPA)	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
22:5 n-3 (DPA)	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
22:6 n-3 (DHA)	g	0.000	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	02/1995
Cholesterol	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	10/1989
Amino Acids													
Tryptophan	g	0.192	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Threonine	g	0.506	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Isoleucine	g	0.498	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Leucine	g	0.832	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Lysine	g	0.672	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Methionine	g	0.172	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Cystine	g	0.229	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Phenylalanine	g	0.520	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Tyrosine	g	0.241	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989

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Valine	g	0.678	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Arginine	g	0.982	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Histidine	g	0.309	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Alanine	g	0.748	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Aspartic acid	g	1.133	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Glutamic acid	g	2.046	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Glycine	g	1.031	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Proline	g	0.507	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Serine	g	0.685	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	10/1989
Other													
Alcohol, ethyl	g	0.0	--	--	--	--	--	--	--	--	Assumed zero	--	04/1985
Flavonoids													
Flavonols													
Quercetin ^{2,3}	mg	15.4	--	1.61	5.1	36.29	--	--	--	--	--	--	--
Proanthocyanidin													
Proanthocyanidin dimers ¹	mg	5.8	--	2.17	3.61	8.57	--	--	--	--	--	--	--
Proanthocyanidin trimers ¹	mg	1.6	--	0.81	0.72	3.25	--	--	--	--	--	--	--

¹Ölschläger, C., Regos, I., Zeller, F.J., and Treutter, D.T. Identification of galloylated propellargonidins and procyanidins in buckwheat grain and quantification of rutin, and flavanols from homostyloids hybrids originating from *F. esculentum* x *F. homotropicum*., 2008 Phytochemistry 69 pp.1389-1397²Kreft, I., Fabjan,N., and Yasumoto, K. Rutin content in buckwheat (*Fagopyrum esculentum* Moench) food materials and products, 2006 Food Chemistry 98 pp.508-512

³Oomah, D. B., and Mazza, G. **Flavonoids and antioxidative activities in buckwheat.**, 1996 J. Agric. Food Chem. 44 pp.1746-1750